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09/804,244	03/13/2001	Motoyuki Kato	G5030.0027/P027	9167

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EXAMINER

RUTTEN, JAMES D

ART UNIT PAPER NUMBER

2122

DATE MAILED: 03/15/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

DM

# Office Action Summary

Application No.

09/804,244

Applicant(s)

KATO ET AL.

Examiner

J. Derek Rutten

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Specification*

2. The abstract of the disclosure is objected to because a typo in line six results in a lower case "w" in the word "when", which should be capitalized as --When-- . Correction is required. See MPEP § 608.01(b).
3. The use of the trademark Java has been noted in this application. It should be capitalized wherever it appears and be **accompanied by the generic terminology**.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

### *Claim Rejections - 35 USC § 112*

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:  

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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6. Claim 1 recites the limitation "said two steps" in line 6. There is insufficient antecedent basis for this limitation in the claim. For the purpose of further examination, this limitation has been interpreted as --said steps of extracting, resolving, and storing--.

7. Claim 2 recites the limitation "said memory referring predetermined data" in line 8. There is insufficient antecedent basis for this limitation in the claim. For the purpose of further examination, this limitation has been interpreted as --said result data--.

8. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "information" in line 4 of claim 3 is used by the claim to mean "reference field", while the accepted meaning is "knowledge obtained from investigation, study, or instruction." The term is indefinite because the specification does not **clearly** redefine the term. For the purpose of further examination, this term has been interpreted as --reference field--.

9. Claim 4 recites the limitation *said **result data** of said resolved reference is stored in a predetermined location in a head code data*. This claim is dependent upon claim 3 which recites the limitation *said program executing means stores said **result data** of said resolved reference in a link information*. Regarding claim 4, it is not clear whether the result data is stored in "head code data" or "link information" or both. Further, if it is stored in both, it is not clear whether "head code data" is contained within "link information", or vice versa, or if there's some other type of relationship. For the purpose of further examination, this limitation will be interpreted in

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light of the specification page 10 lines 28-29 as --said result data of said resolved reference is stored in a predetermined location determined by head code data--.

10. Claims 3-5 are each further rejected for being dependent upon a rejected claim.

***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,815,718 to Tock (hereinafter referred to as “Tock”).

As per claim 1, Tock discloses:

*A program executing method to execute a program written in an interpreter language* (Abstract, lines 1-5: “A **method** and system for providing an **executable module** having an address space for storing program data that is to reside in a read-only storage medium and an address space for storing program data that is to reside in a random access memory is herein described.”), *comprising the steps of:*

*extracting reference data used for specifying a location to be accessed in a memory, and resolving a reference using said reference data* (column 5 lines 56-58:

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“The object module is then transmitted to the linker 136 which **generates a memory layout** for the classes in the application.”; column 5 lines 58-60: “Once the memory layout is determined, the linker 136 **resolves all symbolic references** and replaces them with **direct addresses**.”);

*storing result data of said resolved reference linking to said program through said reference data, said steps of extracting, resolving, and storing being executed before said program is executed* (column 3 lines 19-22: “A browser partitioned in this manner can be **initially stored in the read-only memory** of the client computer. When the system powers on, the second address space is preloaded into the RAM.”; also column 5 lines 65-67: “The output from the linker 136 is a **preloadable executable module** 306 containing the methods and data for these two address spaces.” Comment: The executable module output from the linker contains the result data of the resolved reference. This module is executed only after the steps of extracting, resolving, and storing as referenced above.); *and*

*specifying a location in said memory to be accessed based on said result data of said resolved reference linking to said program through said reference data, when said program is executed which requires to access said memory referring predetermined data* (column 2 lines 7-11: “By **executing** a large portion of the browser from read-only memory, the browser has additional RAM storage to store information-content and executable modules

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that it can obtain from other server computers that the client is in communication with.” Comment: In this passage, Tock executes an application built using the result data obtained via the above mentioned steps including resolving references using reference data to produce result data. Execution inherently involves specifying memory locations otherwise the processor would not be able to obtain required data.).

As per claim 2, Tock discloses:

*An information processing device provided with a program written in an interpreter language* (column 2 lines 53-55: “An **application** developed in the **Java programming language** is executed on such a client **computer.**”), *comprising*:

*a storing means to store result data of a resolved reference linking to said program through a reference data to specify a location in a memory to be accessed* (column 5 lines 56-58: “The object module is then transmitted to the linker 136 which **generates a memory layout** for the classes in the application.”; column 5 lines 58-60: “Once the memory layout is determined, the linker 136 **resolves all symbolic references** and replaces them with **direct addresses.**”; also column 5 lines 65-67: “The output from the linker 136 is a preloadable **executable module** 306 containing the methods and data for these two address spaces.”; further, see FIG. 3 element

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306: ROM/RAM; Comment: The executable module contains the result data for specifying memory locations, and is stored as is shown in FIG. 3, in ROM and RAM.);

*a program executing means to execute said program, which specifies said location in said memory to be accessed based on said result data of said resolved reference linking to said program through said reference data, when said program is executed which requires access to said result data (column 2 lines 53-55 cited above describes a program executing means. All other limitations in this section have also been addressed in the above passages.).*

As per claim 3, the above rejection of claim 2 is incorporated. Tock further discloses:

*An information processing device according to claim 2, wherein said program comprises*

*an object program in byte code and data which represent the content of reference data linked to said program (column 3 lines 46-49; column 4 lines 25-29; column 5 lines 65-67), and*

*said program executing means stores said result data of said resolved reference in a link reference field provided for linking to said object program (column 9 lines 7-12).*

As per claim 4, the above rejection of claim 3 is incorporated. Tock further discloses:



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*An information processing device according to claim 3, wherein  
said link information provided for linking to said object program contains code  
data of a number of fixed lengths (column 6 lines 22-26), and  
said result data of said resolved reference is stored in a predetermined location  
determined by head code data (column 7 lines 47-49).*

As per claim 5, the above rejection of claim 4 is incorporated. Tock further  
discloses:

*An information processing device according to claim 4, wherein said object  
program and said link information are read out of a ROM at the time of executing said  
program (column 3 lines 19-20).*

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 6,349,344 to Sauntry et al. discloses preloading class files and storage in a ROM. U.S. Patent 6,446,254 to Chapman et al. discloses prelinking an interpreted language program and storing on ROM.


14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Derek Rutten whose telephone number is (703) 605-5233. The examiner can normally be reached on M-F 6:30-3:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jdr



TUAN DAM  
SUPERVISORY PATENT EXAMINER